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                 pre-registered REACH substances
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G2 X, Ak, O

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100.0% PROCESSED 1468 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE** PROJECTED ITERATIONS: 27062 TO 31658 PROJECTED ANSWERS: 0 TO

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=> s 11 full

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ACCESSION NUMBER: 2007:1237498 CAPLUS

DOCUMENT NUMBER: 147:494040

TITLE: Antireflective film coatings with good adhesion to

far-UV, x-ray, or electron-beam resists and polymers

therefor

INVENTOR(S): Okumura, Arimichi; Koyama, Hiroshi

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19pp.

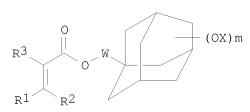
CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 2007284535 | A | 20071101 | JP 2006-112392 | 20060414 |
| PRIORITY APPLN. INFO.: | | | JP 2006-112392 | 20060414 |
| GI | | | | |



I

AB The polymers are prepared from monomers I [R1-R3 = H, F, C1-6 (fluoro)alkyl; W = single bond, bridging group; m = 1, 2, 3; OX = OH, OSO2R4, OCOR5, OCOCH2COR6 (R4-R6 = alkyl; ≥ 1 of X is other than H)]. Coatings containing the polymers and their crosslinking agents, forming films effectively preventing upper resist patterns from degrading, are also claimed.

IT 952678-95-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(antireflective film coatings containing adamantane group-containing macromols.

and with good adhesion to radiation-sensitive photoresists)

RN 952678-95-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-

bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester (CA INDEX NAME)

IT 953812-11-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(antireflective film coatings containing adamantane group-containing macromols.

and with good adhesion to radiation-sensitive photoresists)

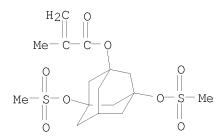
RN 953812-11-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-

bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

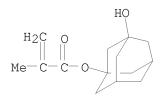
CM 1

CRN 952678-95-4 CMF C16 H24 O8 S2



CM 2

CRN 115372-36-6 CMF C14 H20 O3



CM 3

CRN 2495-37-6 CMF C11 H12 O2

$$\begin{array}{c|c} ^{\rm H2C} & {\rm O} \\ \parallel & \parallel \\ ^{\rm Me-} & {\rm C-C-O-CH_2-Ph} \end{array}$$

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1237276 CAPLUS

DOCUMENT NUMBER: 147:511608

TITLE: Photoresist resin compositions with good substrate

adhesion and dry etching resistance, their (meth)acryl

monomers, and their macromolecules

INVENTOR(S): Koyama, Hiroshi; Murai, Yoshiyuki; Nishimura,

Masamichi

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 25pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| | | | | |
| JP 2007284381 | A | 20071101 | JP 2006-114129 | 20060418 |
| PRIORITY APPLN. INFO.: | | | JP 2006-114129 | 20060418 |
| OTHER SOURCE(S): | MARPAT | 147:511608 | | |

Ι

AB Monomers represented by I [R1-R3 = H, F, C1-6 (fluoro)alkyl; W = single bond, bridging group; y = 1-3; OX = OSO2Rd, OCORe, OCOCH2CORf (Rd, Re, Rf = alkyl)], their polymers preferably having acid-labile alkali-soluble groups, and photoresist compns. containing the macromols. and photoacid generators are sep. claimed. Also claimed is a process for applying the photoresists on substrates, exposing, and developing to form precision patterns.

IT 952678-95-4P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(pos. photoresists containing acid-labile macromols. having good balance between dry etching resistance, solvent solubility, and alkali developability)

RN 952678-95-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester (CA INDEX NAME)

IT 955027-97-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. photoresists containing acid-labile macromols. having good balance between dry etching resistance, solvent solubility, and alkali developability)

RN 955027-97-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate and 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 952678-95-4 CMF C16 H24 O8 S2

CM 2

CRN 279218-76-7 CMF C17 H26 O2

CM 3

CRN 254900-07-7 CMF C12 H14 O4

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1237072 CAPLUS

DOCUMENT NUMBER: 147:477561

TITLE: Substituted adamantyl (meth)acrylate monomers, photoresist protective films of their polymers for

photoresist protective films of their polymers for semiconductors in immersion exposure, and manufacture

of semiconductors using them

INVENTOR(S): Koyama, Hiroshi; Okumura, Arimichi
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|---------------------|-----------------|----------|
| | | | | |
| JP 2007284368 | A | 20071101 | JP 2006-111911 | 20060414 |
| PRIORITY APPLN. INFO.: | | | JP 2006-111911 | 20060414 |
| OTHER COHROL (C). | MADDAT | 1 1 7 • 1 7 7 5 6 1 | | |

OTHER SOURCE(S): MARPAT 147:477561

AB The invention relates to (meth)acrylate monomers of C(R1)(R2):C(R3)CO2WQ1 [R1 - R3 = H, F, (H or F-substituted) C1-6 alkyl; W = single bond, linking group; Q1 = (X0)m-substituted 5-adamantyl; m = 1-3; OX = OSO2R4, O2CR5, O2CCH2COR6; R4 - R6 = (substituted)alkyl]. Pos. photoresists patterned by immersion exposure using the substituted adamantyl (meth)acrylate polymer films showed high fineness and accuracy.

IT 952678-98-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(protective film; substituted adamantyl (meth)acrylate polymer protective films for semiconductor photoresists by immersion exposure)

RN 952678-98-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with

3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl

2-methyl-2-propenoate and cyclohexyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 952678-95-4 CMF C16 H24 O8 S2

CM 2

CRN 101-43-9 CMF C10 H16 O2

CM 3

CRN 79-41-4 CMF C4 H6 O2

IT 952678-95-4P

NAME)

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(substituted adamantyl (meth)acrylate polymer protective films for semiconductor photoresists by immersion exposure)

RN 952678-95-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-1-yl ester (CA INDEX

$$\begin{array}{c|c} H_2C & O \\ \parallel & \parallel \\ Me-C-C-O \\ \\ Me-S-O & O \\ \\ \end{array}$$

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:386486 CAPLUS

DOCUMENT NUMBER: 144:422706

TITLE: Acrylic acid ester-based polymers, positive resist

compositions, and formation of resist patterns

INVENTOR(S): Ogata, Toshiyuki; Matsumaru, Shogo; Shiono, Hirotoshi;

Haneda, Hideo

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 54 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-----------------|------------|-----------------|----------|
| | | | | |
| JP 2006111733 | A | 20060427 | | 20041014 |
| PRIORITY APPLN. INFO.: | | | JP 2004-300716 | 20041014 |
| OTHER COHPORTON | ייי ע כו כו עוע | 144.400706 | | |

OTHER SOURCE(S): MARPAT 144:422706

$$\begin{bmatrix} R^3 \\ C \\ R^4 \end{bmatrix} 0 - SO_2 - R^5$$

Ι

The polymers are (A) α -lower alkyl acrylate-based units having acid-dissociating and dissoln.-inhibiting groups and (B) CH2CR[C(:0)O(CR1R2)sX((CR3R4)tOSO2R5)]u [R, R1-R4 = H, lower alkyl; R1 = R2 \neq alkyl; R5 = (halogenated) lower alkyl; s, t = 0-3; u = 1-3; X = cyclic group]. The resist compns. comprise the polymers, whose alkali solubility is increased by the action of acids, and acid generators. Resist patterns are formed by applying the compns. on substrates, exposing, and developing. Sulfonic acid group-containing norbornene derivs. I [R3, R4 = H, lower alkyl; R5 = (halogenated) lower alkyl; a = 0, 1; t = 0-3] are also claimed. Resolution of the resist compns. is improved.

IT 883868-04-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(sulfonyl-containing acrylate-based polymers for high-resolution pos. resist compns.)

RN 883868-04-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 2-methyl-5-[(methylsulfonyl)oxy]tricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 883868-03-9 CMF C16 H24 O5 S

CM 2

CRN 195000-66-9 CMF C8 H10 O4

CM 3

CRN 115372-36-6 CMF C14 H20 O3

